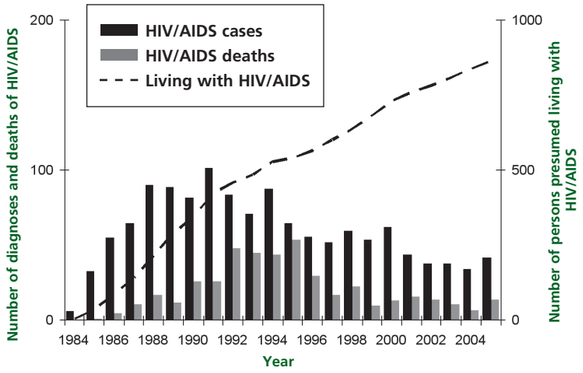


**Figure 2: Morbidity and Mortality of HIV/AIDS by year—Idaho, 1985–2005**

## HIV/AIDS Trends in Idaho

**NEW HIV/AIDS CASES** have outnumbered HIV/AIDS deaths every year since Idaho's first case in 1984.

Prior to the widespread use of protease inhibitors beginning in 1996, deaths averaged 26 per year. Afterward the yearly average dropped to 16.

With new cases outnumbering deaths, the number of reported persons living with HIV/AIDS in Idaho continues to increase.

For more information on HIV/AIDS trends in Idaho, see the 2006 Epidemiologic Profile of HIV/AIDS in Idaho, available on the Department Web Site: **http://www.healthandwelfare.idaho.gov**. Click on the 'Sexual and Reproductive Health' link and look under 'Information'.

**ROUTINE 24-Hour Disease Reporting Line..... 1.800.632.5927**
**EMERGENCY 24-Hour Reporting Line..... 1.800.632.8000**

An electronic version of the Rules and Regulations Governing Idaho Reportable Diseases may be found at http://adm.idaho.gov/adminrules/rules/idapa16/0210.pdf

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## Cryptosporidiosis and Recreational Water Exposure in 2007

**In Idaho**, we will remember the summer of 2007 as a hot, dry, and smoky season. In the medical community, we may remember it as the summer of cryptosporidiosis. Normally, reported cases of cryptosporidiosis peak July through September and are few in number, but this year has brought an unusually high number of cases. During the years 2000–2006, Idaho averaged only 27 reported cases per year (see Figure 1). As of October 22, the Idaho Department of Health and Welfare had received 440 reports of cryptosporidiosis cases for 2007. The vast majority of cryptosporidiosis cases reported exposure to recreational water sources in the days or weeks prior to illness onset. Nearby states, Utah and Colorado, have also seen a sharp increase in the number of cryptosporidiosis cases. The reasons for the regional increases in cryptosporidiosis are currently unclear.

Cryptosporidiosis is most commonly a water-borne disease caused by the parasite *Cryptosporidium*, an organism found in most drinking water prior to treatment, and transmitted by the fecal-oral route. The parasite can be found in recreational waters, including lakes, rivers, swimming pools, and interactive zero-depth splash fountains. Infection occurs when a person ingests water or food contaminated with *Cryptosporidium* oocysts and several reports in the medical literature cite past cryptosporidiosis outbreaks linked to fecal accidents in swimming pools. Person-to-person transmission of *Cryptosporidium* is also an important mode of transmission, usually by close contact with an infected person or careless diaper changing and hygiene practices.[1]

Unfortunately, *Cryptosporidium* is a very infectious and resilient organism. As few as ten *Cryptosporidium* oocysts can infect healthy adults and oocysts can survive in normally chlorinated swimming pools and up to two hours in household bleach.[1] In healthy persons, cryptosporidiosis usually causes a mild, self-limited gastrointestinal disease that frequently includes watery diarrhea. Other symptoms may include abdominal cramping, fever, nausea, body aches, and vomiting.[1] Illness usually begins approximately 7 days following exposure (range 1 to 12 days) and lasts, on average, about 5 to 10 days. Even when symptoms quickly resolve, patients will continue to shed oocysts in their stool for up to several weeks.[1, 2] Additionally, approximately 39% of patients will suffer a recurrent bout of diarrhea or gastrointestinal symptoms, often days or weeks following initial symptom resolution. Persons with compromised immune systems may suffer more profound dehydration and illness.[1]

The clinician should suspect cryptosporidiosis in any patient with watery diarrhea or other gastrointestinal symptoms in the days following exposure to recreational water. The diagnosis of cryptosporidiosis relies on identification of oocysts in the patient's stool and is often problematic for the following reasons: clinicians sometimes fail to consider *Cryptosporidium* in their differential diagnoses; laboratories may not be instructed to test for *Cryptosporidium*; older laboratory methods are insensitive; and more recent diagnostic methods, while more sensitive, are not easily performed in some laboratories. Traditional

*–continued on next page*

stool examinations commonly miss the organism and modified acid-fast stains are similarly insensitive. Newer diagnostic methods, such as immunofluorescent assay (IFA) and enzyme-linked immunosorbent assay (ELISA) are more sensitive and increasingly used methods.[1] Despite the availability of newer diagnostic methods, the clinician must continue to instruct the laboratory to look purposely for *Cryptosporidium*.

Management of cryptosporidiosis in the previously healthy patient should focus on fluid and electrolyte replacement. Oral rehydration, a lactose-free diet, and antimotility agents (*i.e.,* loperamide) are effective supportive measures.[1] Another treatment option, nitazoxanide, is an anti-parasitological medication indicated for treatment of cryptosporidiosis in adults and children over one year of age (see package insert for indications, precautions, dosage instructions, and side effects). Nitazoxanide has an approximately 85% clinical cure rate and 65% parasitological cure rate and shortens clinical illness by several days.[3] In Idaho, there have been reported shortages of nitazoxanide during the recent cryptosporidiosis outbreak. In times of shortage, providers may want to consider reserving nitazoxanide for those patients who have symptoms for greater than 10–14 days or are moderately to severely ill.

### Things to Remember about Cryptosporidiosis:

- Cryptosporidium is a parasite that can be found in recreational waters and usually causes a mild, self-limited gastrointestinal disease often including watery diarrhea.
- Illness usually begins about 7 days after exposure (range 1 to 12 days) and lasts about 5 to 10 days, on average.
- Suspect cryptosporidiosis in any individual presenting with watery diarrhea or other gastrointestinal symptoms in the days following recreational water exposure.
- If you suspect cryptosporidiosis, make sure to ask the laboratory to specifically test for *Cryptosporidium*.
- Nitazoxanide is an approved treatment for cryptosporidiosis in patients over one year of age and has an approximately 85% clinical cure rate and 65% parasitological cure rate.
- Cryptosporidiosis is a reportable disease and should be reported to your local public health district, or the Idaho Department of Health and Welfare within 3 business days by calling 1-800-632-5927.

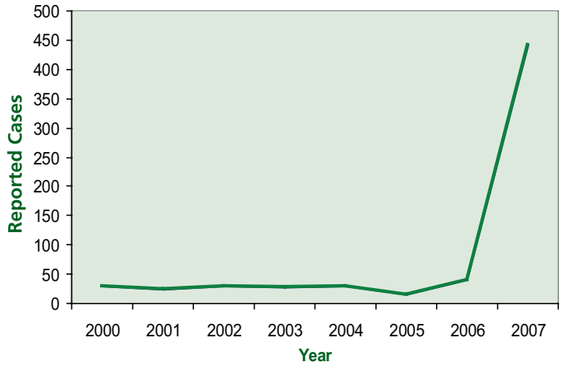


**Figure 1: Reported Cases of Cryptosporidiosis—Idaho 2000 to date**

Prevention practices aimed at limiting exposure to *Cryptosporidium* are the key to controlling the number of cryptosporidiosis cases. Clinicians should provide patients diagnosed with cryptosporidiosis and their family members the following recommendations, as applicable:

- Stress vigorous hand washing after changing diapers or using the restroom along with other personal hygiene measures.
- Children with diarrhea should not attend daycare for at least 24 hours after diarrhea stops.
- Any person diagnosed with cryptosporidiosis should not enter recreational waters for at least two weeks after symptoms resolve.
- Individuals with diarrhea may not participate in food handling. Symptomatic persons excreting *Cryptosporidium* are restricted from working as food employees (IDAPA 16.02.19).
- Healthcare workers with diarrhea should not have direct contact with hospitalized patients.[2]

Cryptosporidiosis is a reportable disease. Report any cases of cryptosporidiosis to your local public health district, or to the Idaho Department of Health and Welfare by calling 1-800-632-5927.

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# RSV Season is Coming Soon: Change in Surveillance

**RESPIRATORY SYNCYTIAL VIRUS (RSV)** is the leading cause of bronchiolitis and pneumonia in children under two years of age.[1] Annually in the U.S., RSV causes an estimated 2.1 million cases of lower respiratory infections and 113,000 hospitalizations in children under five years of age.[2] RSV immunoprophylaxis with monthly intramuscular injections of palivizumab (Synagis® by MedImmune, Inc.) during RSV season decreases hospitalization rates and is cost-effective in properly selected patients compared to placebo.[3, 4] Nationally, the median duration of the RSV season is 15 weeks, but varies significantly between regions, communities, and seasons.[1, 5]

Surveillance data from St. Luke's Regional Medical Center in Boise from 2001–2006 established the RSV season in southwestern Idaho began from December 11 to January 19 and ended from March 28 to May 12.[6] Based upon these data, Idaho healthcare providers should initiate palivizumab injections in high-risk infants in November and plan to continue dosing at least through April 15.[6]

Surveillance initiatives using laboratory reports of confirmed cases of RSV attempt to provide healthcare providers with timely information about RSV activity and seasonality in their community. These results will be used to communicate the need for RSV immunoprophylaxis beyond the average RSV season length, and communicate the early end of RSV season to avoid further costly palivizumab injections. This fall, Idaho's RSV surveillance program will transition from the Idaho American Academy of Pediatrics website to the Idaho Department of Health and Welfare's web site. We encourage you to visit **www.rsv.dhw.idaho.gov** for up-to-date weekly RSV surveillance information.

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# News for Influenza Season 2007–2008

**ALTHOUGH PEAKS IN INFLUENZA ACTIVITY** tend to occur after the holidays in January or February, cases begin appearing in October and November during most years. An important aspect of influenza prevention is the use of either the trivalent inactivated influenza vaccine (TIV) or the live, attenuated influenza vaccine (LAIV) to reduce the risk for influenza virus infection and its complications, in accordance with manufacturers' label.

## New this season:

- On September 19, 2007, FDA announced the approval of the use of FluMist® in healthy children between 2 and 5 years of age. This LAIV, made by MedImmune Vaccines, Inc., was previously limited to healthy children 5 years of age and older and to adults up to age 49 years. See **http://www.fda.gov/bbs/topics/NEWS/2007/NEW01705.html**
- The 2007 recommendations of the Advisory Council on Immunization Practices (ACIP) are available on-line. Although few changes have been made since last year, one important recommendation strongly reemphasized by ACIP is the importance of administering 2 doses of vaccine to all children aged 6 months – 8 years if they have not been vaccinated previously at any time with either LAIV (doses separated by ≥6 weeks) or TIV (doses separated by ≥4 weeks). For a list of approved vaccines for different age groups, visit the ACIP recommendations at: **www.cdc.gov/flu**.

Manufacturers are slated to produce approximately 130 million doses of influenza vaccine (either TIV or LAIV) and as of this printing there are no known vaccine shortages or problems with distribution.

Additional information on seasonal influenza surveillance in Idaho and the nation may be found on the Idaho Department of Health and Welfare web site: **http://www.healthandwelfare.idaho.gov**.